scales. The right pectoral very small, about as long as the eye; the left pectoral is reduced to a minute ray. The ventrals, also, are small, but the extremities of their middle rays extend backwards to the anal fin. The dorsal and anal terminate immediately in front of the caudal. Scales of both sides ctenoid, more so on the coloured than on the blind side. Coloration uniform grey.

This species is distinguished by characters which bring it near to Solea vulgaris as well as to Solea variegata. From the former it is separated by the rudimentary structure of its pectoral fins, from the latter by the number of its fin-rays, by its much smaller scales, and by its coloration. Unfortunately only one specimen was obtained, nearly 6 inches long, at a depth of 150 fathoms. It is in a perfect state of preserva-

tion.

# MOLLUSCA. By Edgar A. Smith.

Of the twenty-four species enumerated in the following list, nearly all were obtained by the 'Porcupine' expedition off the west coast of Ireland or in other parts of the North Atlantic, and have been recorded by Jeffreys in his series of Reports in the Proc. Zool. Soc. 1878, 1879, 1881–85. It would therefore be of little use now to give references and distribution in full, which may be obtained by consulting the papers referred to. The collection only affords slight additional evidence with regard to geographical and bathymetrical considerations.

The fine Dentalium and Sipho, the Lyonsiella, and the new Cuspidaria are perhaps the most interesting of the additions

to the Museum collection.

#### CEPHALOPODA.

Rossia Owenii, Ball.

From 150 to 200 fath.

Rossia sublævis, Verrill.

From 250 fath.

Eledone cirrosa, Lamarek.

From 150 fath.

#### PTEROPODA.

Peracle diversa, Monterosato.

Dead shells dredged in 1000 fath.

No full description of this species has yet appeared; indeed all the information respecting it which has been given is that it differs from *Peracle reticulata*, d'Orb., in having a shorter spire and a deeper and denticulate suture. To these distinguishing characters may be added that of the columella being surrounded by a *double* keel instead of a single one as in *P. reticulata*. The surface of fresh specimens has the same epidermal reticulation in both species.

I have not yet had an opportunity of examining the types of Pelseneer's *P. bispinosa*, but I have a strong suspicion that it is the same as *P. diversa*. Still, as no reference is made to the keel which circumscribes the columella (nor is it depicted in the figure), I must refrain from expressing a

positive opinion.

Cavolinia (Diacria) trispinosa, Lesueur. Dead shells in from 250 to 1000 fath.

#### GASTROPODA.

Buccinum undatum, var.

From 55 fath.

The single young specimen, about an inch long, is peculiarly fusiform, whitish, without colour-markings, and clothed with a delicate fibrous epidermis. Only the feeblest indication of oblique plication is discernible. Adult specimens of this variety were obtained by the 'Porcupine' expedition off the south of Ireland in 113 and 180 fath., and off the west coast in 90 and 159 fath.

Sipho (Siphonorbis) fusiformis, Broderip.

From 110 fath.

The single specimen obtained is very fine, and considerably exceeds the dimensions usually assigned to this shell. Its

total length is 52 millimetres; aperture 23.

The 'Porcupine' expedition obtained examples off the west and south of Ireland in from 90 to 725 fath. The species occurs in deep water off the Norwegian coast, and was also dredged by the 'Travailleur' north of Spain in from 277 to 731 fath. (Jeffreys, MSS.).

Columbella (Anachis) haliweti, Jeffreys.

From 1000 fath.

Bulla semilævis, Seguenza.

From 1000 fath.

Cylichna (Sao) ovata, Jeffreys.

From 1000 fath.

This species was obtained in various parts of the North and West Atlantic in from 350 to 1000 fath. by the 'Porcupine' and 'Challenger' expeditions.

#### SCAPHOPODA.

Dentalium candidum, Jeffreys.

From 1000 fathoms.

One of the two specimens obtained is very fine, and considerably exceeds the dimensions quoted by Jeffreys. It is 85 millimetres in length ( $=3\frac{3}{3}$  inches), and 8 in diameter at the aperture. The longitudinal striæ in this example can be traced from the apex along about half the length; and at a little more than an inch from the broader extremity a strongly marked reparation of an injury is visible, the result of an accident or the attack of an enemy.

This species was first obtained by the 'Valorous' expedition in from 410 to 1750 fath.; it was subsequently dredged at several stations off the west and south of Ireland by the 'Porcupine' expedition at depths ranging from 420 to

2435 fath.

# Cadulus Olivi, Scacchi.

From 1000 fath.

Two specimens from the above depth agree exactly with others in the Museum obtained by the 'Porcupine' expedition, which Jeffreys associated (and probably correctly) with this species. The latter were dredged off the west of Ireland in 1230 fath., and south of Ireland in 539 fath.

## PELECYPODA.

Montacuta substriata, Montagu.

From 50-60 fath.

As usual around the British coasts, these specimens were dredged attached to the spines of Spatangus purpureus.

<sup>\*</sup> Proc. Zool. Soc. 1882, p. 663. Remarks on distribution and synonymy are also given.

Cardium echinatum, Linné.

From 55 fath.

One young specimen, 10 millim. in length.

Cardium minimum, Philippi.

From 1000 fath. One example only.

Lyonsiella gemma, Verrill.

Lyonsiella gemma, Verrill, Proc. U.S. Nat. Mus. 1880, vol. iii. p. 396; Dall, Bull. Mus. Comp. Zool. Harvard, vol. xii. p. 288; Smith, 'Challenger' Lamellibranchiata, p. 166.

From 1000 fath.

One perfect right valve was obtained.

Verrill's locality was off the east coast of the United States in 487 fath.

I cannot reconcile Verrill's description with the *Pecchiolia* insculpta of Jeffreys, with which it has been united by Dall (l. c. supra). The form appears to be quite different. In

L. insculpta the anterior end is narrowed, the posterior obliquely arcuate and broad. On the contrary L. gemma is "broadly rounded anteriorly," and has the "posterior end short, narrowed, and tapered to an obtuse

point "—terms exactly applicable to the single valve at hand. On comparison with a 'Porcupine' example of L. insculpta, which very closely resembles the figure in the Proc. Zool. Soc. 1881, pl. lxx. fig. 4, the texture and surface ornamentation are seen to be identical, excepting that there are two or three extra radii.

When extensive series of these two forms are available, their outline may prove very variable and of little specific importance. This I think is very likely to be the case.

Verticordia subquadrata, Jeffr.

From 1000 fath.

Cuspidaria (Cardiomya) Greenii, sp. n.

Shell small, fragile, subpellucid, narrowly rostrate posteriorly; ventral outline regularly curved, but finely dentate by the terminations of the radiating ribs; dorsal margin on both sides of the beaks straight, subhorizontal, anterior portion very short; anterior outline of the valves

oblique, slightly arcuate; radiating costellæ about 30, those

just in front of the central part stronger than those down the anterior side and the few upon the rostrum, which is truncate at the end and well marked off from the rest of the shell by a conspicuous contraction in the lower margin. Length 7, height  $3\frac{2}{3}$  millim.

From 1000 fath.

Only a single specimen of this species was obtained. It is peculiar for the straightness of the hinge-line. In this respect, to some extent, it resembles the figure of *Cardiomya perrostrata*, Dall (Bull. Mus. Comp. Zool. Harvard, vol. xii. pl. ii. figs. 3 a, 3 b). That species, however, is distinguished by a somewhat longer rostrum, and the main portion of its valves is more globular.

## Nuculana pusio (Philippi)?

From 1000 fath.

Several specimens from this locality I cannot distinguish from others obtained by the 'Porcupine' expedition, which were named *Leda pusio* of Philippi by Jeffreys. With this determination, however, I am not at all satisfied, for both the description and figure of Philippi indicate a shell of a considerably different form. I have not had an opportunity of seeing fossil examples, upon which the species was founded, and therefore hesitate to separate the recent specimens as a distinct species.

I feel compelled to adopt the generic term Nuculana not-

withstanding the observations of Mr. Dall \*.

Mörch + in his paper "On the genera of Mollusca established by H. F. Link," arrived at a similar conclusion.

Dall has translated "Die Schalen gleich, schliessen überall" (part of Link's diagnosis) thus: "shell smooth, closed all round," and states that this "will not apply to the group separated by Schumacher, afterwards, under the name of Leda." The correct rendering of the above sentence I believe should be the valves equal (or alike) closed all round ‡, terms which do apply to the only species quoted by the author, namely, N. rostrata, which is synonymous with N. pernula of Müller, under which name this species is now usually known.

As Nuculana has some years precedence over Leda, in Mr. Dall's words, it "must necessarily be adopted. The longer an untenable name is retained, the more inconvenience

<sup>\*</sup> Bull. Mus. Comp. Zool. 1886, vol. xii. p. 245.

<sup>†</sup> Proc. Zool. Soc. Lond. 1862, p. 228. ‡ It is not probable that notice was taken of the very slight chink at the end of the rostrum.

results to science when it is, as it always will be, eventually overthrown."

Nuculana pustulosa, Jeffreys.

From 1000 fath.

Nucula reticulata, Jeffreys.

From 1000 fath.

Nucula corbuloides, Seguenza.

From 1000 fath.

This and the preceding species were both taken in deep water off the west of Ireland by the 'Porcupine' expedition.

Limopsis cristata, Jeffreys.

From 1000 fath.

Lima (Limatula) subovata, Jeffreys.

From 1000 fath. One valve only.

This species was dredged by the 'Valorous,' 'Porcupine,' and 'Challenger' expeditions at various stations in the Atlantic and the Mediterranean, and according to Jeffreys very fine examples were obtained by the Norwegian and Dutch Arctic Expeditions.

## CRUSTACEA. By R. I. POCOCK.

Although not extensive in numbers this collection is of considerable interest, inasmuch as it adds several forms to the Crustacean fauna of Great Britain.

Of course many of the specimens obtained are referable to species of common occurrence on our coasts, but I am not aware that such forms as Anamathia Carpenteri, Lispognathus Thomsoni, and Parapagurus pilosimanus have ere this gained the right to be included in a list of the fauna of the British area. Two species only are now for the first time characterized. One of these, Ebalia nux, has long been known from the Mediterranean under a manuscript name; the other Eupagurus carneus, appears to be wholly new.

## DECAPODA.

## Anamathia Carpenteri.

Amathia Carpenteri, Norman, in Wyville Thomson's 'Depths of the Sea,' p. 175, fig. 35 (1873).

Ann. & Mag. N. Hist. Ser. 6. Vol. iv.